# The Centenarian Population: 2007-2011

American Community Survey Briefs

By Brian Kincel Issued April 2014 ACSBR/12-18

#### INTRODUCTION

This brief provides an overview of the centenarian population living in the United States based on the 2007–2011 American Community Survey (ACS) 5-year data. It is a companion to the 2010 Census Special Report *Centenarians: 2010*, which focused on the count of centenarians, their sex, race, and Hispanic-origin characteristics, and their geographic distribution. This brief explores the social and economic characteristics collected annually in the ACS to provide information on the marital status, educational attainment, veteran status, income, and poverty levels of centenarians. Since centenarians represent a rare population, distinct from the rest of the older population in many ways, they are compared to the 65 years and older population.

Centenarians, people 100 years or older, made up a very small portion of the total population in the 2007–2011 ACS, accounting for 55,000 people (0.02 percent). By comparison, the 65 years and over population accounted for 40 million people or 13 percent of the total population. The majority of centenarians were female (81 percent). Women were also the majority of the 65 years and over population (57 percent). This disproportionately female representation in both the 65 years and over and centenarian populations was expected, since sex differences in mortality over time contribute to higher percentages of females than males at older ages.

### **AGE QUESTION**

Since the inception of the ACS in 1996, age has been asked of all persons living in a household. When group quarters were included in the survey universe in 2006, age was asked of all persons in group quarters as well.<sup>2</sup> The data on age were derived from answers to a two-part question in which respondents were asked to give an age in whole, completed years as of the interview date as well as the month, day, and year of birth. Both age and date of birth were used in combination to determine the most accurate age at the time of the interview.

Data on age are used to determine the applicability of other questions for a particular individual (e.g., education and income) and to classify characteristics in tabulations. Age data are needed to interpret most social and economic characteristics used to plan and analyze programs and policies. Age is central for many federal programs that target funds or services to children, working-age adults, women of childbearing age, or the older population. For more information on age, see the *American Community Survey 2011 Subject Definitions*.<sup>3</sup>



<sup>&</sup>lt;sup>1</sup> See the 2010 Census Special Report *Centenarians: 2010*, at <www.census.gov/prod/cen2010/reports/c2010sr-03.pdf>.

<sup>&</sup>lt;sup>2</sup> Group Quarters are places where people live or stay in a group living arrangement that is owned or managed by an entity or organization providing housing and/or services for the residents. Nursing facilities/skilled-nursing facilities are one type of group quarters. For more information on group quarters, see <www.census.gov/acs/www/Downloads/data\_documentation/GroupDefinitions/2011GQ\_Definitions.pdf>.

<sup>&</sup>lt;sup>3</sup> See "Age" on pages 46–48 of the *American Community Survey* 2011 Subject Definitions, available at <www.census.gov/acs/www/Downloads/data\_documentation/SubjectDefinitions/2011\_ACSSubjectDefinitions.pdf>.

## CHARACTERISTICS OF CENTENARIANS IN THE UNITED STATES

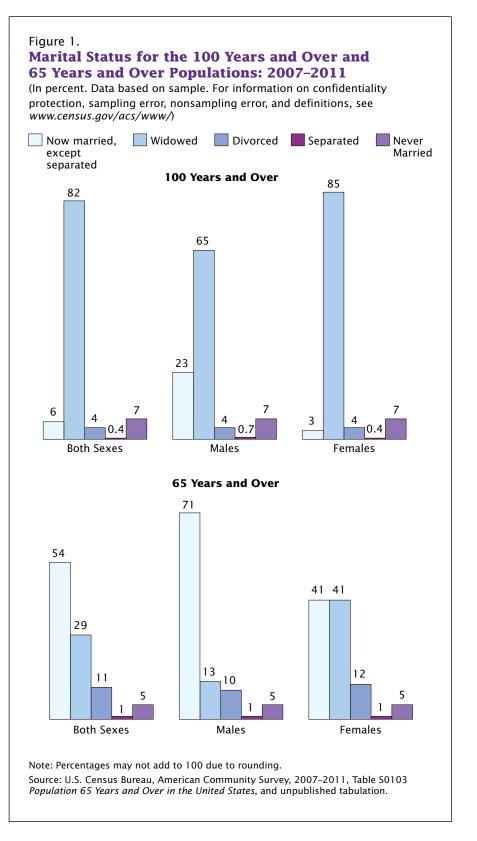
This section examines the centenarian population compared with the population 65 years and over. Since it has already been noted that the centenarian population is overwhelmingly female, comparisons will be made by sex when helpful.

#### **Marital Status**

Figure 1 shows that most centenarians reported being widowed (82 percent). Another 6 percent of centenarians were married, 4 percent were divorced, 0.4 percent were separated, and 7 percent were never married.4 As expected, because of their younger age, the percentage widowed of the 65 years and over population (29) percent) was much smaller than that of the centenarian population. Over half of the 65 years and over population were married (54) percent). The percentage divorced of the 65 years and over population (11 percent) was more than double the percentage of the centenarian population (4 percent). The percentage separated of the 65 years and over population was also higher than that of the centenarian population (1 percent and 0.4 percent, respectively). The percentage never married of the 65 years and over population (5 percent) was lower than that of the centenarian population (7 percent).

Looking at marital status by sex, men in the centenarian population were more likely than women to be married (Table 1). Twenty-three percent of centenarian males were married, compared with 3 percent of females. Sixty-five percent of centenarian males were widowed, compared with 85 percent of females. A similar pattern existed

<sup>&</sup>lt;sup>4</sup> The percentage of married centenarians and the percentage of never married centenarians were not significantly different.



for men and women who were 65 years and over. Seventy-one percent of males 65 years and over were married, compared with 41 percent of females. Thirteen percent of males 65 years and over were widowed, compared with 41 percent of females.

Table 1.

Demographic and Social Characteristics for the 100 Years and Over and 65 Years and Over Populations: 2007–2011

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <a href="https://www.census.gov/acs/www">www.census.gov/acs/www</a>)

	Population 100 years and over				Population 65 years and over					
Characteristic	Number	Margin of error (±)1	Percent	Margin of error (±)1	Number	Margin of error (±)1	Percent	Margin of error (±)1		
TOTAL		(_)				J. (_)				
Both sexes	54,956	1,603	100.00	Х	39,608,820	4,840	100.00	X		
Male	10,312	711	100.00	X	17,009,215	2,650	100.00	X		
Female	44,644	1,381	100.00	X	22,599,605	3,358	100.00	Χ		
MARITAL STATUS										
Now married, except separated										
Both sexes	3,537	434	6.44	0.75	21,488,938	69,217	54.25	0.17		
Male	2,377	328	23.05	3.05		23,247	71.42	0.15		
Female	1,160	217	2.60	0.48	9,341,539	47,744	41.33	0.20		
Widowed	,					,				
Both sexes	44,813	1,319	81.54	1.04	11,583,629	48,244	29.25	0.11		
Male	6,715	586	65.12	3.02	2,252,165	15,382	13.24	0.09		
Female	38,098	1,189	85.34	1.00	9,331,464	34,745	41.29	0.15		
Divorced										
Both sexes	2,454	319	4.47	0.57	4,269,691	23,419	10.78	0.06		
Male	456	147	4.42	1.38	1,615,270	10,297	9.50	0.05		
Female	1,998	288	4.48	0.64	2,654,421	15,342	11.75	0.06		
Separated		44-	0.40	0.00	454 740	4 500		0.04		
Both sexes	233	117	0.42	0.22	454,742	4,588	1.15	0.01		
Male	74	72 76	0.72	0.70	219,324	3,270	1.29	0.02		
Female	159	76	0.36	0.17	235,418	3,188	1.04	0.02		
Both sexes	3,919	443	7.13	0.74	1,811,820	9,258	4.57	0.03		
Male	690	190	6.69	1.78	775,057	5,094	4.56	0.03		
Female	3,229	403	7.23	0.83	1,036,763	6,706	4.59	0.03		
EDUCATIONAL ATTAINMENT										
Less than high school <sup>2</sup>										
Both sexes	23,477	1,040	42.72	1.44	9,195,553	24,169	23.22	0.07		
Male	4,440	489	43.06	3.75	3,775,954	12,638	22.20	0.08		
Female	19,037	905	42.64	1.48	5,419,599	16,277	23.98	0.07		
High school diploma or GED										
Both sexes	14,915	803	27.14	1.14	13,594,862	21,981	34.32	0.06		
Male	2,212	355	21.45	2.87	4,999,760	13,326	29.39	0.08		
Female	12,703	700	28.45	1.21	8,595,102	14,720	38.03	0.07		
Some college or associate's degree	0.040	470	45 44	0.07	0.615.04.4	04 544	04 75	0.00		
Both sexes	8,319	470	15.14	0.87	8,615,214	21,511	21.75	0.06		
Male	1,459	221 402	14.15 15.37	2.15 0.88	3,674,881 4,940,333	12,593 13,570	21.61 21.86	0.07 0.06		
FemaleBachelor's degree or higher	6,860	402	15.37	0.88	4,940,333	13,570	21.00	0.06		
Both sexes	8,245	602	15.00	0.95	8,203,191	19,042	20.71	0.05		
Male	2,201	306	21.34	2.51	4,558,620	12,968	26.80	0.08		
Female	6,044	509	13.54	1.06	3,644,571	9,947	16.13	0.04		
VETERAN STATUS										
Veteran										
Both sexes	2,918	389	5.31	0.71	9,162,715	15,249	23.13	0.04		
Male	2,695	383	26.13	3.27	8,903,318	14,990	52.34	0.10		
Female	223	79	0.50	0.18	259,397	3,083	1.15	0.02		
Nonveteran					.	•				
Both sexes	52,038	1,606	94.69	0.71	30,446,105	13,586	76.87	0.04		
Male	7,617	623	73.87	3.27	8,105,897	14,363	47.66	0.10		
Female	44,421	1,374	99.50	0.18	22,340,208	4,344	98.85	0.02		

X Not applicable.

<sup>&</sup>lt;sup>1</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval.

<sup>&</sup>lt;sup>2</sup> This category refers to those who completed any level of education less than a high school diploma or GED, including those with no schooling completed. Note: Percentages may not add to 100.00 due to rounding.

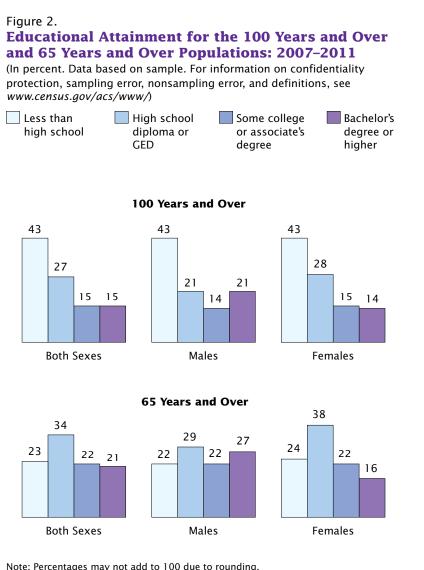
Source: U.S. Census Bureau, American Community Survey, 2007–2011, Table S0103 Population 65 Years and Over in the United States, and unpublished tabulation.

#### **Educational Attainment**

Centenarians displayed a broad range of educational attainment (Figure 2). The largest group, 43 percent, reported receiving less than a high school diploma or GED, while just over a quarter were high school graduates (27 percent).5 Fifteen percent of centenarians reported having some college education or an associate's degree, while another 15 percent earned at least a bachelor's degree or higher.6

The 65 years and over population displayed higher educational attainment than centenarians. The largest group was high school graduates, accounting for over one-third of the 65 years and over population (34 percent). The 65 years and over population had larger percentages with some college education or an associate's degree (22 percent) and with a bachelor's degree or higher (21 percent) than the centenarian population. Additionally, 23 percent of the 65 years and over population reported earning less than a high school diploma or GED, compared with 43 percent of centenarians.

Men in both age groups were more likely than women to attain a bachelor's degree or higher. Twenty-one percent of centenarian men earned a bachelor's degree or higher compared with 14 percent of centenarian women. There was a slightly larger gap in the 65 years and over age group, with 27 percent of men and 16 percent of women earning a bachelor's degree or higher. Centenarian males and females displayed similar percentages reporting some college or an associate's degree, with 14 percent for males and 15



Note: Percentages may not add to 100 due to rounding.

Source: U.S. Census Bureau, American Community Survey, 2007-2011, Table S0103 Population 65 Years and Over in the United States, and unpublished tabulation.

percent for females.7 Both men and women 65 years and over had higher percentages at this level of educational attainment with 22 percent each for men and women reporting some college or an associate's degree.

Women were more likely than men to conclude their educational attainment with a high school

diploma or GED in both age groups. Twenty-eight percent of centenarian women and 38 percent of women 65 years and over reported having a high school diploma or GED, compared with 21 percent and 29 percent for men in respective age groups. Forty-three percent of both men and women 100 years and over had received less than a high school education.8 Males and

<sup>&</sup>lt;sup>5</sup>The "less than a high school diploma or GED" category refers to those who completed any level of education less than a high school diploma or GED, including those with no schooling completed.

<sup>&</sup>lt;sup>6</sup> The percentage of centenarians with some college or an associate's degree was not significantly different from the percentage of centenarians with a bachelor's degree or higher.

<sup>&</sup>lt;sup>7</sup> The percentage of centenarian males with some college or an associate's degree was not significantly different from the percentage of centenarian females with some college or an associate's degree.

<sup>8</sup> The difference between the percentage of centenarian males and females that earned less than a high school diploma or GED was not significant.

females 65 years and over reported substantially smaller percentages of less than a high school education, at 22 percent and 24 percent, respectively.

#### **Veteran Status**

Five percent of all centenarians were veterans. Since this age group was predominantly female in 2007–2011, and far fewer women than men served during World War II, this results in a lower percentage of veterans for the entire population 100 years and older. The 65 years and over population is not as disproportionately female as the centenarian population, contributing to a higher percentage of veterans at 23 percent.

Males were more likely to be veterans than females in both the centenarian and 65 years and over populations. About one-quarter of centenarian men (26 percent) were veterans compared with less than 1 percent of women. Fifty-two percent of men 65 years and over were veterans compared with 1 percent of women.

#### **Income**

Turning to income, Table 2 shows that 83 percent of the centenarian population received Social Security income, while less than about one-quarter received retirement income (24 percent). 9, 10 The 65 years and over population displayed a higher percentage of those receiving Social Security income (88 percent) as well as retirement income (38 percent). The mean Social Security income (\$11,933)

and retirement income (\$13,408) amounts were lower for centenarians than for the 65 years and over population (\$12,605 and \$18,643, respectively).<sup>11</sup>

Centenarian males were less likely to report Social Security income and more likely to report retirement income than centenarian females. Seventy-seven percent of centenarian men compared with 84 percent of centenarian women received Social Security income. Thirty percent of centenarian males compared with 23 percent of centenarian females received retirement income. In the 65 years and over population, similar percentages of males and females received Social Security income, at 88 percent and 87 percent, respectively. The percentage of males 65 years and over reporting retirement income (45 percent) was higher than that of their female counterparts (32 percent).

Regardless of age, men displayed higher mean Social Security and retirement incomes. Male centenarians received a mean Social Security income of \$13,137 and a mean retirement income of \$17,516, compared with \$11,678 and \$12,190, respectively, for centenarian females. Males 65 years and over received a mean Social Security income of \$14,711 and a mean retirement income of \$22,793, compared with \$11,006 and \$14,152, respectively, for females.

#### **Poverty**

Although the majority of centenarians for whom poverty status was determined were above the poverty line, 17 percent lived in poverty. This was larger than the 9 percent of the 65 years and over population that lived in poverty. While the difference between the percentages of centenarian men (19 percent) and women (17 percent) living in poverty was not significant, the corresponding difference between men (7 percent) and women (11 percent) for the 65 years and over population was significant.

#### CONCLUSION

Centenarians made up a very small portion of the total population, representing a rare group. The centenarian population was 81 percent female and this affected some characteristics. Most centenarians were widowed. Centenarians reported a broad range of educational attainment. The majority of centenarians received retirement and/or Social Security income and lived above the poverty line. In many aspects, the centenarian population shared comparable trends with the 65 years and over population.

#### **SOURCE AND ACCURACY**

The data presented in this report are based on the ACS sample interviewed from January 2007 through December 2011. The estimates based on this sample describe the actual average values of person, household, and housing unit characteristics over this period of collection. Sampling error is the uncertainty between an estimate based on a sample and the corresponding value that would be

<sup>&</sup>lt;sup>9</sup> Individuals can receive income from more than one source.

Netirement income includes retirement pensions, survivor benefits, and disability income. See "Income in the Past 12 Months" starting on page 78 of the American Community Survey 2011 Subject Definitions, available at <www.census.gov/acs/www/Downloads/data\_documentation/SubjectDefinitions/ 2011\_ACSSubject Definitions.pdf>.

<sup>11</sup> The mean of a particular type of income is obtained by dividing the total amount of that income for persons within their age group by the total number of those receiving said income within their age group. See "Mean Income" on page 81 of the American Community Survey 2011 Subject Definitions, available at <www.census.gov/acs/www/Downloads/data\_documentation/Subject Definitions/ 2011\_ACSSubjectDefinitions.pdf>.

<sup>12</sup> See "Poverty Status in the Past 12 Months" on page 102 of the American Community Survey 2011 Subject Definitions, available at <www.census.gov/acs/www/Downloads/data\_documentation/Subject Definitions/ 2011\_ACSSubjectDefinitions.odf>.

Table 2. Economic Characteristics for the 100 Years and Over and 65 Years and Over Populations: 2007–2011

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <a href="https://www.census.gov/acs/www">www.census.gov/acs/www</a>)

	Population 100		years and over		Population 65 years and over			
Characteristic	Number	Margin of error (±)1	Percent	Margin of error (±) <sup>1</sup>	Number	Margin of error (±) <sup>1</sup>	Percent	Margin of error (±) <sup>1</sup>
TOTAL		. ,		. ,		, ,		
Both sexes	54,956	1,603	100.00	X	39,608,820	4,840	100.00	Х
Male	10,312	711	100.00	X	17,009,215	2,650	100.00	X
Female	44,644	1,381	100.00	X	22,599,605	3,358	100.00	Х
INCOME <sup>2</sup>								
With earnings								
Both sexes	1,592	347	2.90	0.59	7,391,100	18,127	18.66	0.05
Male	869	247	8.43	2.13	4,125,707	9,993	24.26	0.06
Female	723	171	1.62	0.37	3,265,393	13,159	14.45	0.06
With retirement income, survivor or disability pensions								
Both sexes	13,394	647	24.37	0.99	14,858,232	42,986	37.51	0.11
Male	3,063	352	29.70	2.72	7,722,013	18,346	45.40	0.10
Female	10,331	646	23.14	1.22	7,136,219	28,362	31.58	0.11
With cash public assistance income	4.050		0.47		400.000		4.00	0.00
Both sexes	1,359	233	2.47	0.44	402,636	5,266	1.02	0.02
Male	195	80	1.89	0.78	130,847	2,409	0.77	0.02
Female	1,164	207	2.61	0.47	271,789	3,777	1.20	0.02
With Social Security income	45 000	1 001	00.00	4 40	04 700 000	00.000	07.00	0.04
Both sexes	45,602	1,381	82.98	1.18	34,786,890	20,060	87.83	0.04
Male	7,953	611	77.12	3.35	15,013,697	10,613	88.27	0.06
Female	37,649	1,213	84.33	1.12	19,773,193	14,028	87.49	0.07
With Supplemental Security income	4 000	397	7.65	0.70	1 671 104	7 000	4.00	0.02
Both sexes	4,203		7.65	0.72	1,671,184	7,893	4.22	0.02
Male	726 3,477	198 375	7.04 7.79	1.96	564,076	4,318 5,969	3.32 4.90	0.03
Female	3,477	3/3	7.79	0.81	1,107,108	5,969	4.90	0.03
Mean earnings <sup>3</sup>			.,				.,	.,
Both sexes	51,050	16,231	X	X	37,013	152	X	X
Male	53,086	18,031	X	X	46,985	239	X	X
Female  Mean retirement income, survivor or disability pensions <sup>3</sup>	48,602	29,815	X	X	24,414	121	Х	Х
Both sexes	13,408	1,193	X	X	18,643	43	Х	Х
Male	17,516	3,543	x	x x	22,793	65	X	X
Female	12,190	835	X	l $\hat{x}$	14,152	58	X	X
Mean cash public assistance income <sup>3</sup>	12,100		^	· `	1 1,102		^	,,
Both sexes	9,086	2,004	Х	X	4,308	71	X	Х
Male	8,092	4,459	X	Х	4,867	117	X	Χ
Female	9,252	2,215	X	X	4,038	74	X	Х
Mean Social Security income <sup>3</sup>	,	,			<u> </u>			
Both sexes	11,933	196	X	X	12,605	11	X	X
Male	13,137	509	X	X	14,711	10	X	X
Female	11,678	195	X	X	11,006	15	Х	Χ
Mean Supplemental Security income <sup>3</sup>								
Both sexes	7,069	347	X	X	7,244	25	Х	Χ
Male	7,919	1,141	X	X	8,227	46	Х	X
Female	6,892	357	X	X	6,743	27	Х	Х
POVERTY								
Individuals in poverty for whom poverty was determined								
Both sexes	6,231	533	17.35	1.31	3,593,580	13,708	9.39	0.04
Male	1,591	364	18.96	3.75	1,157,487	6,304	6.97	0.04
Female	4,640	441	16.86	1.35	2,436,093	11,760	11.24	0.06

X Not applicable.

<sup>&</sup>lt;sup>1</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval.

 $<sup>^{\</sup>rm 2}$  Individuals can receive income from more than one source.

<sup>&</sup>lt;sup>3</sup> Mean values are shown in dollar amounts.

Source: U.S. Census Bureau, American Community Survey, 2007–2011, Table S0103 *Population 65 Years and Over in the United States*, and unpublished tabulation.

obtained if the estimate were based on the entire population (as from a census). Measures of sampling error are provided in the form of margins of error for key estimates included in this report. All comparative statements in this report have undergone statistical testing, and comparisons are significant at the 90 percent level unless otherwise noted. In addition to sampling error, nonsampling error may be introduced during any of the operations used to collect and process survey data such as editing, reviewing, or keying data from questionnaires. For more information on sampling and estimation methods,

confidentiality protection, and sampling and nonsampling errors, please see the ACS Multiyear Accuracy of the Data document located at <www.census.gov/acs/www/Downloads/data\_documentation/Accuracy/MultiyearACSAccuracy ofData2011.pdf>.

## WHAT IS THE AMERICAN COMMUNITY SURVEY?

The ACS is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data for the nation, states, congressional districts, counties, places, and other localities every

year. It has an annual sample size of about 3.3 million addresses across the United States and Puerto Rico and includes both housing units and group quarters (e.g., nursing facilities and prisons). The ACS is conducted in every county throughout the nation, and every municipio in Puerto Rico, where it is called the Puerto Rico Community Survey. Beginning in 2006, data were released for geographic areas with populations of 65,000 and greater. For information on the ACS sample design and other topics, visit <www.census.gov/acs /www>.